HARTCROWSER
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September 5, 2000

Mr. Norm Linton
Area Manager
Potlatch Corporation
1100 Railroad Avenue
P.O. Box 386
St. Maries, Idaho 83861

Re: Addendum No. 1 for Corrective Action Plan
Avery Landing Site
Avery, Idaho
J-2296-07

Dear Mr. Linton:

This report presents the information requested by Idaho Department of Environmental Quality (IDEQ), Fish and Wildlife, and Idaho Corps of Engineers after reviewing the Corrective Action Plan for Avery Landing Site in Avery, Idaho.

General Clarifications

The expected duration of the project is 3 to 4 weeks. Work completed in the river is expected to last 2 to 3 weeks.

There will be four types of wells on site following the planned construction: 2-inch-diameter monitoring wells; 4-inch-diameter monitoring wells; 12-inch-diameter extraction wells; and 24 to 36-inch-diameter collection wells.

When construction begins, the current water extraction system will be turned off to allow the use of the reinjection trench. The water extraction system will remain off after the containment wall is completed. Oil skimmer pumps will be left in place and used as needed to remove product in the extraction well.

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SILT CONTROL AND CONTINGENCY SPILL PLAN

Clarification on Plastic Material to be Used on the Cofferdam

The plastic to be used to help seal the cofferdam will consist of 6-mil or greater reinforced polyethylene plastic, or 30-mil "Arctic Liner" PVC alloy material.

Clarification on Treatment of Dewatering Water

Water generated during dewatering activities will be run through an oil/water separator. The water will then be pumped to existing treatment system reinjection trench located across the road. Should the dewatering pumping rate be too great for complete reintroduction, a slipstream will be diverted though a rock ditch back to the river. This slipstream will have to meet a turbidity level of 25 NTU above background due to duration of the work (greater than 10 days). Should the slipstream be required, it will be monitored using a field turbidity meter. If the turbidity exceeds 20 NTU above background, work will be halted and other institutional controls implemented to ensure no water is discharge above the criteria.

WALL CONSTRUCTION

Clarification on the Locations of Additional Collection Wells

In addition to the five collection wells along the containment wall, collection wells will be installed in areas where the 4-inch-diameter monitoring wells that contain a depth of product more than 6 inches. At a minimum one collection well will be installed in the area of MW-11, were extremely thick product has historically been found.

LINER INSTALLATION

Clarification on Bedding Material

Bedding material to be placed above and below the geo-fabric and plastic liner will be fines, 3/4-inch minus, derived from screening the local soil.

RIPARIAN ZONE INSTALLATION

Clarification on Tree Root Migration

Tree roots will not penetrate a non-permeable layer. The root has to sense a water source for it to grow in a direction. Since the plastic liner that will be installed is non-permeable, root penetrations will not occur.

Clarification of Tree Type, Spacing, and Performance Criteria

Cottonwood trees will be planted on 10-foot centers with willow trees approximately every fifth tree. Though the organization of the trees to allow clustering may change the order of the trees, the ratio and number of trees will be consistent. A minimum of 14 willow and 56 cottonwood trees will be planted. In addition the shrubs recovered during removal activities will be planted among the trees. The riparian zone will be monitored to ensure at least an 80 percent survival rate after 3 years.

LONG-TERM SITE MONITORING

Clarification of Monitoring Locations, Frequency, and Action Levels

Monitoring for the first year will be completed monthly in all existing monitoring, extraction, and collection wells on the site. The data will be tabulated and presented in the yearly report that will recommend follow-on site monitoring. Potlatch is required to notify IDEQ and remove product from the wells when the product depth exceeds 6 inches in any collection well.

LIMITATIONS

Work for this project was performed, and this letter report prepared, in accordance with generally accepted professional practices for the nature and conditions of the work completed in the same or similar localities, at the time the work was performed. It is intended for the exclusive use of Potlatch Corporation for specific application to the referenced property. This report is not meant to represent a legal opinion. No other warranty, express or implied, is made.

Any questions regarding our work and this response letter, the presentation of the information, and the interpretation of the data are welcome and should be referred to the undersigned.

We trust that this report meets your needs.

Sincerely,

HART CROWSER, INC.

TERRY W. MONTOYA
Project Manager

MATTHEW F. SCHULTZ, P.E.
Sr. Associate Chemical Engineer

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